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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/886,466 | 06/22/2001 | Jun Takahashi | 82086-0002 | 4966 |
| 7590 | 11/03/2003 | | | |
| | | | EXAMINER | |
| | | | SCHWARTZ, PAMELA R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1774 | |

DATE MAILED: 11/03/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

CL011

| | | |
|------------------------------|--------------------------------|------------------|
| Office Action Summary | Application N . | Applicant(s) |
| | 09/886,466 | TAKAHASHI ET AL. |
| | Examiner Pamela R. Schwartz | Art Unit 1774 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 September 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1774

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mouri et al. (4642247) in view of Sadasivan (6419356) for reasons of record and for reasons given below.

Applicants' amendments have been carefully considered but do not overcome the rejection. From applicants' specification, the examiner has determined that the added limitation to claim 1 is accomplished by adding silica and surfactant to the coating composition and stirring prior to application onto a support. Mouri et al. disclose that the upper layer may contain defoaming agents and may also contain fillers such as silica (see col. 13, lines 11-17 and col. 14, lines 25-33). The upper layer is generally made by the same method as the under layer, which is dispersing or dissolving the components, and coating by a conventional technique (see col. 10, lines 3-7 and col. 6, lines 36-50). Dispersion or dissolving steps would include stirring as performed in applicants' examples. Consequently, applicants' amendments do not overcome the rejection of record. Sadasivan et al. is relied upon in combination with Mouri et al. as in the rejections of record.

2. The specification appears to be confusing in that on page 9, line 14, it appears to state that a surfactant of HLB of 9 or more is added, but at page 10 and in the claims, the limitation appears to be 9 or less. Clarification and correction are requested.

Applicant's arguments filed July 31, 2003 have been fully considered but they are not persuasive. Applicants continue to argue that the references do not teach an ink permeable layer having an HLB of 9 or less. This is not what applicants claim. Instead,

the claims are directed to a sheet having an ink-permeable layer on its surface that contains a surfactant of HLB of 9 or less. This surfactant is in an ink permeable layer.

Mouri et al. discloses a medium that may have a defoaming agent present in either or both of the under layer and the upper layer (col. 14, lines 25-41). The upper layer is both an ink-receiving layer and an ink-permeable because the layer promotes penetration of ink into the under layer (see col. 6 line 64 to col. 7, line3).

The secondary reference teaches that use of surfactants with HLB less than 10 will have a defoaming effect (i.e. the surfactant will act as a defoaming agent). It is not relied upon for its teachings concerning the upper or lower layer specifically. One of ordinary skill in the art would have found it obvious to use a defoaming agent from an ink-receiving layer of one ink jet recording medium in an ink receiving layer of another ink jet recording medium when the second medium (i.e. the medium of the primary reference) discloses inclusion of defoaming agents therein, with the expectation that the defoaming agent will act as such in the second medium. Applicants arguments are confusing because they refer to the HLB of layers instead of the HLB of surfactants, and imply that the examiner is attempting to combine reference by shifting an entire layer of the secondary reference into the primary reference. This is not the case.

Finally, the motivation to combine references has been clearly set forth. The primary reference generally discloses inclusion of a defoaming agent in an ink receiving layer and the secondary reference discloses particular defoaming agents for use in ink receiving layers. One of ordinary skill in the art would have found the

suggestion to use a defoaming agent in the primary reference and the particulars of such an agent used in the same art for the same purpose in the secondary reference.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela R. Schwartz whose telephone number is 703-308-2424. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PRSchwartz
November 1, 2003



PAMELA R. SCHWARTZ
PRIMARY EXAMINER